START OF ROLL

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THE DOW CHEMICAL COMPANY

MIDLAND
February 22, 1965

"CHLORACNE" PROBLEM, MEETING - FEBRUARY 18, 1965

Present: V. K. Rowe
W. P. Fulkey
K. C. Barrons
V. L. Carbus
B. C. Huff
M. B. Boyle
D. E. Fletcher
W. E. Gill
L. Silverstein
C. B. Otis
G. E. Lynn
F. C. Amstutz
E. C. Stuebling

cc: J. D. Doedens

Otis introduced the meeting by indicating that recent information indicates "chloracne" components may be present in Dow 2,4,5-trichlorophenol. Byproducts is concerned about 2,4,5-T acid, silvex, [illegible], [illegible], and Erbon. This meeting is to review status of our knowledge of this subject, potential hazards, possible effect on Dow image, legal implications, and need for possible quarantine. These basic decisions are to be made without consideration of economic impact.

Summarizing past experiences, V. K. Rowe said that Dow had no chloracne problems related to trichlorophenol production for 26 years until process changes were effected in the spring of 1964. Based on research information accumulated over the years, some ideas have been put together regarding the likely compounds which give rise to this problem. The 2,3,6,7-tetrachlorodibenzodioxin has been pretty well established as a possible contaminant. Also, there is an indication of the possible presence of the 2,3,7,8 derivative and two other components designated as "Unknown No. 1" and "Unknown No. 2".

Boyle said that the rabbit test will detect 1 ppb of the 2,3,7,8-dioxin. VPC will detect 0.5-0.1 ppm of the 2,3,7,8-dioxin in trichlorophenol. Also, VPC will detect about 5.0 ppm of the 2,3,7,8-dioxin in 2,4,5-T acid. (By phone on Feb. 19, 1965, Boyle indicated to the writer that it is now felt that VPC will detect 1.0 ppm.)

In samples checked from October, 1964, to the present, no dioxin was found in trichlorophenol samples from 200 bldg. using the animal test. The animal test has indicated some activity in one sample of a filter cake which concentrates impurities removed in T-acid processing.